

ABSTRACT

A system and method for removing contaminants from water. Water with contaminants is passed through a series of three electrochemical cells powered by a direct current source. The first and third electrochemical cells have anodes formed from a non-ferrous material, while the second electrochemical cell is formed from a ferrous material. The iron dissolved in the second cell acts as a flocculent and adsorptive for a variety of contaminants, while hydrogen peroxide and other oxidants formed in the electrochemical cells react with biological entities and other contaminants. The resulting insoluble materials are then filtered.